

Notice of Allowability

Application No.

10/530,235

Applicant(s)

FERNANDEZ, ANGEL VALERO

Examiner

Craig Price

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telecon on 4 December 2007.
2. ☒ The allowed claim(s) is/are 1.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 4/4/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Douglas Miro on 4 December 2007.

The application has been amended as follows:

In The Claims

1. (currently amended) Continuous automatic fluid flow control and distributor valve, with a magnetic seal, that permits a flow of a fluid to be distributed among three inlet and outlet ways, one of which (10) is shared and remains continuously open and the other two (7') and (7'') are progressive opening and closing type, the valve comprising:

a cylindrically-shaped seal made up of two identical ferromagnetic outer discs (1), which enclose between them another smaller-diameter concentric inner disc (2) and a permanent magnet, the two outer discs having rims that are bevel-cut towards the inner magnetic disc (2), so that the three discs conjointly define a perimeter groove that acts as a housing for a spring ring (4) which forms a direct means of sealing;

a valve body composed of two superimposed parts ~~(5')~~ ~~(5")~~, one of which ~~(5')~~ forms a rolling track of the outer discs with the bevelled rims of the seal and is of ferromagnetic material, the body being provided with an intercommunicating chamber (6) between the fluid distribution ways ~~(7')~~ ~~(7")~~ ~~(inlets and outlets)~~, which are of dimensions that permit small movements to take place in an interior of the body due to rolling of the seal, axes of the inlet ways ~~(7')~~ ~~(7")~~ and of the outlet way (10) or vice versa being disposed perpendicularly; and seal movement means composed of: a bi-metal conductor (8) capable of contracting when an electrical voltage is applied to it, causing with its contraction movement of the seal limited by lateral stops ~~(11)~~; and an opposing spring (9), disposed to keep the seal in dynamic equilibrium or take it up to a home position when no electrical voltage is applied to the bi-metal conductor (8).

In The Specification

Page 5, lines 3 and 23, "(10)" has been changed to - - (7) - -,

Page 5, line 16, "(5') - (5")" has been changed to - - (5) - (5') - -,

Page 5, line 28, "(11)" has been changed to - - (10) - -.

In The Abstract

~~The object of this Patent is a "continuous automatic fluid flow control and distributor valve, with a magnetic seal", the main use of which is explained in the disclosure of the invention.~~

A valve which ~~its structure~~ is composed of: - A seal consisting of two identical ferromagnetic discs (1), which enclose another smaller-diameter disc (2) and a permanent magnet, the rims (3) of the outer discs (1) being bevelled and the three discs conjointly forming a perimeter groove housing a spring ring (4), - A valve body in two superimposed parts ~~(5')-(5")~~ (5)-(5') with an intercommunicating chamber (6), inside which the rolling movement of the seal can take place, - Seal movements means consisting of: a bi-metal conductor (8) and an opposing spring (9).

The reason for the amendment was to properly identify reference indicators in the claims and specification with the drawings.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: None of the prior art discloses or renders as obvious, in combination with the rest of the limitations set forth in claim 1, a valve body composed of two superimposed parts, one of which forms a rolling track of the outer discs with the bevelled rims of the seal and is of ferromagnetic material, the body being provided with an intercommunicating chamber between the fluid distribution ways, which are of dimensions that permit small movements to take place in an interior of the body due to rolling of the seal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Overbeke (2,322,658), Guara (3,486,517), Johnson (4,965,545), Nakayama et al. (5,865,418) and Neuhaus (5,967,485) all disclose similar valves.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP



5 December 2007



RAMESH KIRSHNAMURTHY
PRIMARY EXAMINER